

## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <a href="http://about.jstor.org/participate-jstor/individuals/early-journal-content">http://about.jstor.org/participate-jstor/individuals/early-journal-content</a>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

Hewing of all forts of plain pelmell per 1000 — 1 — 6. Pinning per 1000 8d: Pins p 1000: 8d --- 1 --- 4. Three bushels ( Winchester measure ) of good Lime will take 6. bushels of fresh water sand, and serves to lay on one Poole of work; though much less may serve the turn. 300 of lathes to every Poole of work.

1000 of Lath nailes to every 300 of Lathes.

An able workman may lay on 2000 or more of flate by the day.

Chequer-work confifts in Angles, Circles and semi-circles which requires no common skill, and time in hewing and

laying.

It is worthy observation, that if a side-wall happen to take wett by the beating of the weather, or the like, when nothing else will cure it, our kerseing with Slate (which is much used in the curious fronts of houses, especially in Townes) will quickly remedy it.

## Some Observations

Concerning the odd Turn of some Shell-snailes, and the darting of Spiders, made by an Ingenious Cantabrigian and by way of Letter communicated to Mr. I. Wray, who transmitted them to the Publisher for the R. S.

Sir, Tan deny you nothing, and you may doe what you please with the Notes I send you. You would know of me (you fay) what I have observed concerning the Odd Turn of some shell-snailes with us in England, and the Darting of Spiders.

I will tell you then of the first, that I have found two forts of them, easily to be distinguisht one from the other, and from all besides, because the Turn of the wreaths is from the right hand to the left, contrary to what may be seen in common Snailes. They are very small, and might therefore well escape thus long the more Curious Naturalists; neither of them much exceeding, at lest in thickness, a large Oat-corne.

The B bbbb 2

The first I thus describe: The open of the shell is pretty round, the second turn or wreath is very large for the proportion, and the rest of the wreaths, about the number of six, are still lessen'd to a point. This Turben or Conical sigure is well neare a quarter of an inch; the colour of the shell is dusk sh, yet when the shrunk animall gives leave, you may see day through it, and then it is of a yellowish colour. These shells are extreame brittle and tender, so that I cannot send them in a Lester: You may guels at the sigure, if I tell you, they are some-thing like those of Aldrovandus de Testaceis, markt p. 359. Turbinum levium.

Of the fecond fort I fend you inclosed at a venture halfe a dozen; (you fee, in that I can so plentifully repair the loss of the former, that they are not very rare; (they seem to be much stronger and thicker shell'd; they are well near half as long again as the other, and as slender; they have the exact figure of Oat-corn, being as it were pointed at both ends, and the middle a little swelled. The open of the shell is not exactly round there being a peculiar sinus in the lower part thereof. I think, you may number about 10. Spires, having their turn from the right hand to the lest. The colour of the Shell is of a dark and

reddish brown.

There are two forts of this make described, and with their respective Cutts, in Fabius Columna, but ours agree not with them in any thing more than the odd Turn: though 'tis true, that the other, the third there described, and call'd by him Cochlea Terrestricturbinata et striata, is very frequent in the road 'twixt Canterbuy and Dover, and likewise in some wooddy parts of the Woles in Lincoln-shire. There are odd differences in this very Snaile very remarkable, as its having but one pair of horns (if I mistake not,) as also a hard shelly cover; its manner of wearing that cover &c. which I leave to another opportunity and place.

And to return to our two now described Snailes, they, when they creep, lift up the point of their shells towads a perpendicular, and exert with part of their body two pair of horns, as

most of their kind doe.

In March they are still to be found in paires, Aristotle affirmes

all these kind of creatures to be of a spontaneous birth, and no more to contribute to the procuetion of one another, than Trees, and therefore to have no distinction of Sex. I have no reason to subscribe to his authority, since I have seen so many of them pair'd, and in the very act of Venery. That they engender then, is most certain; but whether those, that are thus found coupled, be one of them male, and the other semale, or rather, as you observ'd, and published to the World in the Catalogue of Plants growing Wild about Cambridge, that they are both male and semale and do in the act of generation both recieve into themselves, and immit a like penis (as it seems probable to any man that shall part them) I leave to surther and more minute discovery to determine.

Moreover, we find in Aristotle a Circle of other parts, but of these no mention at all. However the Romans knew something extraordinary of these kind of Animals, that made them so choice of them, as to reckon them among their most delicate food, and to use all care and diligence to breed and fat them for their Tables at large described to us by Varre. Their tast and

relish is none, methinks, of the most agreeable.

Of late, comparing Buffy's Histoire Amoureuse de Gaule with Petronius Arbiter, out of whom I was made to believe, he had taken two of his Letters word for word, besides other Love-intrigues; I found, inrunning him over, what satisfied me not a little in this very subject of Snailes; viz. That these very Animals, as well as other odd things in Nature, as Truffs, Mushroms, and no doubt too the Cossi or great Worms in the Oak (another Roman dainty) were made use of by the Antients to incite Venery. You'l there find, that the distressed and feeble Lover prepares himself with a ragoust of Snailes necks (cervices Cochlearum;) and indeed in this part it is that these strange penes's are to be found.

Mr. Hook does as it were promise the Anatomy of this Insect. It were surely worth his pains, and the Learn'd World would be obligged to him for a piece of this nature; nothing,

<sup>\*</sup> When this was written, accurately done of the inward part of Malpighius de Bombyce was not any infect, being yet publishe.\*

1es publishe.

These Snailes are to be found frequent enough under the loose bark of Trees, as old Willows, and in the ragged clefts of Elmes and Oak &c. and in no other place else, that I could observe.

You tell me, that it is generally concluded by Philosophers, That the reason of the usual Turn of Snailes from the left to the right, is the like motion of the Sun, and that especially more Nord-ward, there having not been hitherto discovered any in our parts of the contrary Turn to the Sun's motion. But this is not the only case, where they are out, who consult not the Stores of Nature, but their own phancy. What I am surther about to tell you concerning Spiders, is as evident an Instance against them.

The long Threads in the Air in Summer, and especially towards September, have been a strange puzel to the wiser World. It would divert you, though you know them as well as I, if I here reckoned up the ridiculous opinions concerning them, but I omit them, and proceed to tell you the certain and immediate Authors of them, and how they make them.

I say then, that all Spiders, that spin in a thread, (those, which we call Shepherds or long-legg'd Spiders, never doe;) are the makers of these threads, so much wondred at, and in

such infinite quantities every where.

I fent you the last Summer a Catalogue of thirty forts of spiders, that I had distinguish there with us in England; and I must confess, I had well near compleated that number, with many other Experiments concerning them, before I discovered this fecret. You must not expect here from me any thing more, than what you demanded of me; for as for other Experiments, I reserve them till our meeting.

I had exactly mark'd all the ways of Weaving, used by any forts of them, and in those admirable works I had ever noted that they still let down the Thread, they made use of; and drew it after them. Happily at length in nearly attending on one, that wrought a nett, I saw him suddainly in the mid-work to desist, and turning his taile into the wind to dart out a thred with the violence and streame, we see water spout out of a spring: This thread taken up by the wind, was in a moment e-

mitted some fathoms long, still issuing out of the belly of the animal; by and by the Spider lept into the air, and the

thread mounted her up swiftly.

After this first discovery, I made the like Observation in almost all the forts of Spiders, I had before distinguished; and I found the Air filled with young and old failing on their threads, and undoubtedly seizing Gnats and other Insects in their passage; there being often as manifest signes of slaughter, as leggs, wings of Flyes &c. on these threads, as in their webbs below.

One thing yet was a wonder to me, viz. That many of these threads, that came down out of the Air, were not fingle, but snarled and with complicable we o'ly locks, now more now less; and that on these I did not always find spiders, though many times I had found two or three upon one of them: whereas when they first slew up, the threadwas still single. or but little tangled, or, it may be, thicker in one place then another. In the end, by good attention I plainly found, what fatisfied me abundantly, and that was this; That I observed them to get to the top of a stalk or bough, or some such like thing, where they exercise this darting of threads into the air, and if they had not a mind to faile, they either swiftly drew it up again, winding it up with their fore-feet over there head into a lock, or break it off short, and let the air carry it away. This they will doe many times together, and you may fee of them, that have chains of these locks or snarled thread before them, and yet not taken flight.

Again, I found, that after the first flight, all the time of their sailing they make locks, still darting forth fresh supplies

of thred to sport and saile by.

It is further to be noted, that these complicated threads are

much more tender, than our house-webbs.

In Winter and at Christmas I have observed them busy a darting, but sew of them saile then, and therefore but single threds only are to be seen; And besides, they are but the young ones of last Autumns hatch, that are then employed; and it is more than probable, that the great ropes of Autumne are made only by the great ones, and upon long passages, and Summer weather, when great numbers of prey may invite them to stay longer up.

But

## (1016)

But I cease to be tedious: I have many Experiments by me to satisfy many doubts, that may be made, viz. of the infinite number of these Insects, and their numbersels Increase, and besides, how strangely they are able to surnish and husband great quantities of matter out of so small a bulk &c.

You may expectall from me after another which at least I think necessary to confirm to me these; and other things concerning their Generation and Poilon. What I have said at present, is such as I have certainly observed; and you may take the Truth of these Observations for excuse of the

ill Texture of them.